

# SEQUENCE LISTING

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Spangfort, Michael Dho  
Larsen Jorgen Nedergaard

<120> NOVEL RECOMBINANT ALLERGENS

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<151> 1999-03-16

<150> 60/078,371

<151> 1998-03-18

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|-------------|------------|-------------|-------------|------------|------------|-----|
| ggtgaaaaca  | ttgaaggaaa | tggagggcct  | ggaaccatta  | agaagatcag | ctttcccgaa | 180 |
| ggcctccctt  | tcaagtacgt | gaaggacaga  | gttgatgagg  | tggaccacac | aaacttcaaa | 240 |
| tacaattaca  | gcgtgatcga | gggcgggtccc | ataggcgaca  | cattggagaa | gatctccaac | 300 |
| gagataaaga  | tagtggcaac | ccctgatgga  | ggatccatct  | tgaagatcag | caacaagtac | 360 |
| cacaccaaaag | gtgaccatga | ggtgaaggca  | gagcagggtta | aggcaagtaa | agaaatgggc | 420 |
| gagacacttt  | tgagggccgt | tgagagctac  | ctcttggcac  | actccgatgc | ctacaactaa | 480 |

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<400> 37

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Phe | Asn | Tyr | Glu | Thr | Glu | Thr | Thr | Ser | Val | Ile | Pro | Ala | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Leu | Phe | Lys | Ala | Phe | Ile | Leu | Asp | Gly | Asp | Asn | Leu | Phe | Pro | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Ala | Pro | Gln | Ala | Ile | Ser | Ser | Val | Glu | Asn | Ile | Glu | Gly | Asn | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Pro | Gly | Thr | Ile | Lys | Lys | Ile | Ser | Phe | Pro | Glu | Gly | Leu | Pro | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Tyr | Val | Lys | Asp | Arg | Val | Asp | Glu | Val | Asp | His | Thr | Asn | Phe | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Tyr | Asn | Tyr | Ser | Val | Ile | Glu | Gly | Gly | Pro | Ile | Gly | Asp | Thr | Leu | Glu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Ile | Ser | Asn | Glu | Ile | Lys | Ile | Val | Ala | Thr | Pro | Asp | Gly | Gly | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Leu | Lys | Ile | Ser | Asn | Lys | Tyr | His | Thr | Lys | Gly | Asp | His | Glu | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Ala | Glu | Gln | Val | Lys | Ala | Ser | Lys | Glu | Met | Gly | Glu | Thr | Leu | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Arg | Ala | Val | Glu | Ser | Tyr | Leu | Leu | Ala | His | Ser | Asp | Ala | Tyr | Asn |     |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     |

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 <213> vespula vulgaris

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| agtcttaaac | cgaattgcgg | taataaggta | gtggtatcct  | atggtctaac | gaaacaagag  | 120 |
| aaacaagaca | tcttaaagga | gcacaatgac | tttagacaaa  | aaattgcacg | aggattggag  | 180 |
| actagaggta | atcctggacc | acagcctcca | gcgaagaata  | tgaaaaattt | ggtatggaac  | 240 |
| gacgagttag | cttatgtcgc | ccaagtgtgg | gctaatacaat | gtcaatatgg | tcacgatact  | 300 |
| tgcagggatg | tagcaaaata | tcaggttggg | caaaacgtag  | ccttaacagg | tagcacggct  | 360 |
| gctaaatacg | atgatccagt | taaactagtt | aaaatgtggg  | aagatgaagt | gaaagattat  | 420 |
| aatcctaaga | aaaagttttc | gggaaacgac | tttctgaaaa  | cgggccatta | cactcaaattg | 480 |
| gtttgggcta | acaccaagga | agttggttgt | ggaagtataa  | aatacattca | agagaaatgg  | 540 |
| cacaaacatt | accttgatg  | taattatgga | cccagcggaa  | actttaagaa | tgaggaactt  | 600 |
| tatcaaacia | agtaa      |            |             |            |             | 615 |

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<400> 39

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Asn | Tyr | Cys | Ile | Lys | Cys | Leu | Lys | Gly | Gly | Val | His | Thr | Ala |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | Lys | Tyr | Gly | Ser | Leu | Lys | Pro | Asn | Cys | Gly | Asn | Lys | Val | Val |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |



